

Abstract

A process for the production of hydrogen from anaerobically decomposed organic materials by applying an electric potential to the anaerobically decomposed organic materials, including landfill materials and sewage, to form hydrogen, and for decreasing the time required to treat these anaerobically decomposed organic materials. The organic materials decompose to volatile acids such as acetic acid, which may be hydrolyzed by electric current to form hydrogen. The process may be continuously run in sewage digestion tanks with the continuous feed of sewage, at landfill sites, or at any site having a supply of anaerobically decomposed or decomposable organic materials.